WOWU SAFETY BRIEF

Air Department, USS ELROD (FFG-55)

LCDR XXXXX

24 March XXXX

WOWU SAFETY BRIEF

- *Executive Summary*
- *Responsibilities*
- *General Safety*
- *Flight Deck Evolution*
- *Flight Deck Launch and Recovery Procedures*
- *Emergency Procedures*
- *Emergency Approaches*
- *Lost Helo*
- *Mishap Procedures*
- *Ordnance*
- *WOWU Requirements*

REFERENCES

- *OPNAVINST 3710.7 NATOPS General Operating Procedures*
- *OPNAVINST 4790.2E Naval Aviation Maintenance Program*
- *NWP-42 Shipboard Helicopter Operating Procedures*
- *CNSLINST 3750.8 Aviation Operations/Safety Program*
- *A1-H60BB-NFM-000 SH-60B NATOPS*
- *CHSLWLINST 3710.1 Standard Operating Procedures (SOP)*
- *HSL48INST 3710.4 SOP*

VENOM 505

- *Sensors*
  - *APS-124 Radar*
  - *AAS-44 FLIR with laser designator*
  - *ALQ-142 ESM*
  - *UYS-1 Acoustics*
  - *ASQ-81 MAD*
  - *APX-76B IFF Interrogator*
- *Stores*
  - *AGM-119B Penguin Missile*
  - *AGM-114B/K Hellfire Missile*
  - *Mk-46/Mk-50 Torpedo*
  - *Sonobuoys*
  - *Mk25/58 Smokes*
- *Communications*
  - *SQR-4 Data Link*
  - *2 x UHF*
    - *Vinson*
    - *UHF/DF*
  - *VHF*
  - *HF*
- *Navigation*
  - *GPS/Doppler*

VENOM 505

- *Enhanced Survivability Package*
  - *ALQ-144 IR Jammer*
  - *AAR-47 Plume Detector*
  - *ALE-39 Countermeasures Dispenser*
  - *M-60D (or GAU-16) Crew-Served Machine Gun*

CAPABILITIES/LIMITATIONS

- *FUEL*
  - *3800 lbs/3+30*
  - *600 lbs on deck*
- *SPEED*
  - *150 kts S&L*
  - *130 kts max range*
  - *70 kts max endurance*
- *Range*
  - *ROA=max D/L range*
  - *100 NM ship-to-ship*
  - *200 NM ship-to-shore*
  - *150 NM shore-to-ship*
- *WEIGHT*
  - *21,700 lbs maximum*
  - *6,000 lbs Cargo Hook*
  - *600 lbs Hoist*
- *LANDING CURRENCY*
  - *1 landing w/in 7 days*
- *PASSENGERS*
  - *2 maximum*
  - *Day only*
  - *Cold WX gear as reqd*

RESPONSIBILITIES

- *LSO*
  - *Safety/Control of the flight deck*
- *HCO*
  - *Safe flight deck procedures*
  - *Flight quarters team leader*
  - *FOD walkdown*
- *OPS*
  - *Mission brief*
  - *OPSEC/COMSEC*
- *OOD*
  - *Overall control of flight OPS*
  - *Qualified lookouts*
  - *Rescue boat*
  - *Fox Corpen*
  - *Maneuver/straighten*
  - *WX changes*
- *CIC*
  - *Positive control of helo*
- *CSO*
  - *Maintenance of SGSI/HRS*

RESPONSIBILTIES (CONT)

- *1ST LT*
  - *Security of topside*
  - *Maintain rescue equipment and float coats*
- *CHENG*
  - *Crash crew training*
  - *Helo Refueling Bill*
  - *RAST support*
- *DCA*
  - *Supervise Crash-on-Deck drills*
  - *Maintenance of firefighting equipment*
- *AV FUELS PO*
  - *Direct helo refueling OPS*
  - *Complete daily/weekly testing*

GENERAL SAFETY

- *SAFETY IS PARAMOUNT*
- *Unsafe Evolution - STOP*
- *Flight Quarters - only Essential Personnel on Flight Deck*
- *No Hats Topside during Flight Quarters*
- *No Flash Pictures at Night*
- *FOD*
  - *WX decks/flight deck*
  - *Rags/paper/ballcaps*
  - *No trash dumping*

"Enhanced Combat Readiness through Improved Safety Awareness"

FLIGHT DECK SAFETY

- *Personal Protective Equipment*
  - *Cranial (Hearing/SIght)*
- *Float Coats*
  - *During Flight Quarters*
  - *Aft of Foul Line at night/Rough Weather*
- *Deck Lighting for Night Maintenance (OOD Coordination)*
- *Two Man Rule at Night*
- *Aircraft Moves - Traverse Dangers*
- *HERO - 14 CADS*
- *HERP - Radar/Data Link/HF*

DECK STATUS LIGHTS

- *RED*
  - *No Maneuvering Restrictions*
- *AMBER*
  - *No Maneuvering - Steady Course*
  - *Winds 45 kts any Direction*
- *GREEN*
  - *Steady Course - Winds within Appropriate Envelope*
  - *Gentle Maneuvers during HIFR - inform HAC*

LAUNCH SEQUENCE

- *TBD*
  - *Ordnance Load on Deck*
- *L-90 Min*
  - *CIC Brief*
- *L-85 Min*
  - *Traverse and Spread Helo*
- *L-60 Min*
  - *COMSEC*
  - *Aircrew Brief*
- *L-45 Min*
  - *Preflight*
- *L-30 Min*
  - *Flight Quarters*
  - *LSO Checklist*
- *L-25 Min*
  - *FOD Walkdown*
- *L-20 Min*
  - *All Stations Manned and Ready*
- *L-18 Min*
  - *Start Engines*
- *L-15 Min*
  - *Engage Rotors*
- *L-3 to 1 Min*
  - *Ready Launch/Fox Corpen/Green Deck*
- *0 Min*
  - *T/O, “OPS Normal”*

RECOVERY SEQUENCE

- *R-20 Min*
  - *Flight Quarters*
- *R*
  - *Recover*
- *R+5 Min*
  - *Disengage Rotor/Shutdown*
- *R+10 Min*
  - *Engine Waterwash/Dry*
- *R+20 Min*
  - *Straighten/Traverse*
- *R+30 Min*
  - *Fold Rotors/Tail Pylon*
- *R+45 Min*
  - *Refuel*
- *R+60 Min*
  - *Rinse/Wipedown*
- *R+75*
  - *Ordnance Download on Deck*
- *TBD*
  - *Traverse into Hangar*

SHIP MANEUVERING

- *Straighten/Traverse*
  - *Steady Course*
- *Spread/Fold Main Rotors*
  - *Max Winds 45 kts*
- *Spread/Fold Tail Pylon*
  - *Max Winds 45 kts*
- *Engaging/Disengaging Rotors*
  - *Steady Course/Max Winds 45 kts*
- *Launch/Recovery*
  - *Steady Course/Wind Envelopes*
- *HIFR*
  - *Wind 0-30P/10-30 kts*

FLIGHT DECK LAUNCH AND RECOVERY PROCEDURES

- *GREEN Deck Information*
  - *Fox Corpen/Speed*
  - *Barometric Pressure*
  - *True Wind*
  - *Relative Winds*
  - *Pitch/Roll*
- *LSO Controlling Flight Deck - BIG Advantage*
- *RLQs*
  - *Minimize Sound Powered Phone Comms*
  - *EMCON with Deck Status Lights*

FLIGHT DECK LAUNCH AND RECOVERY PROCEDURES (CONT)

- *Ship Preparations*
  - *CIWS Mounts to Manual/Trained Away*
  - *Antennas Lowered as Necessary*
- *Non-SH-60B Operations*
  - *Need Chock/Chains and LSE*
  - *HCO - Controls Flight Deck (No LSO)*
  - *Green Deck Given to Helo before Chocks/Chains Removed*

WIND ENVELOPES

- *WIND Envelopes*
  - *Primarily designed for Controllability*
  - *Safety Margin affected by:*
    - *System Degradations*
    - *Environmental Conditions*
    - *Fatigue*
    - *Experience*
  - *Dynamics:*
    - *Preferred no true tail winds at night unless tactically or operationally necessary*
    - *Relative tail winds - HAC/CO/OOD*
  - *20P/20KTS ideal*

PLACEHOLDER FOR SPECIFIC SHIP WIND ENVELOPES

WEATHER

- *DAY*
  - *500/1*
- *RLQS*
  - *500/2*
- *SAR*
  - *300/1*
- *TEMPERATURE vs. DEW POINT*
  - *FOG*
- *Keep Aircraft Apprised*

EMERGENCY PROCEDURES

- *Emergency Flight Quarters*
- *Inflight - Senior Pilot report to CIC*
- *Close Distance to Helo, or Provide Vectors to Suitable Landing Area*
- *Inform Other Aircraft in Vicinity*
- *Alert other Pilots*
- *Log all Actions*
- *Standby Premishap Plan*
  - *Binder located in CIC*

EMERGENCY PROCEDURES (CONT)

- *3 Categories*
  - *Immediate Ditch/Crash - Plot Position*
  - *Immediate Landing - Emergency Flight Quarters*
  - *Precautionary Landing - Could be Upgraded to Immediate Landing*
- *Single Engine Failure*
  - *Max Winds over Deck*
- *Controllability*
  - *Stable Deck*
- *Hung MAD*
  - *High Hover*

INSTRUMENT APPROACH

- *TACAN*
  - *Minimums 200ft/1/2mi visibility*
- *Next Priority*
  - *Divert Helo to Area of Better Visibility*
  - *Alternate Ship*
  - *Alternate Airfield*

EMERGENCY APPROACHES

- *ELVAS*
  - *WX <200/1/2*
  - *FC Radar*
  - *Start 400 FT/4 NM/70 KTS astern of Ship*
  - *Missed Approach Point 50 FT/100 YDS*
- *Smokelight Approach*
  - *40 FT/40 KTS*
  - *Vector Helo astern 2 NM, Heading BRC*
  - *Smokes Dropped at Specific Time Interval or when Preceding Smoke Disappears*
  - *Communicate # of Smokes to Helo*

LOST HELO PROCEDURES

- *When location of Helo is in doubt, ASTAC:*
  - *Attempt to regain radio, D/L, and radar contact*
  - *Send information in the blind*
  - *Search all IFF Modes*
  - *Monitor Guard (243.0 and 121.5)*
- *Inform OTC*
- *Keep up-to-date Estimate of Helo's Fuel State*
- *Bring up TACAN/Monitor SLQ-32 for APS-124*
- *Other aids*
  - *Black Smoke*
  - *Starshells*
  - *Energized Prebriefed Sonobuoy Channel*

LOST HELO PROCEDURES (CONT)

- *If Contact Regained:*
  - *Vector helo back to ship*
  - *Ensure posit of helo is recorded*
  - *Check fuel state*
  - *Reestablish D/L if required*
  - *If comms still unsatisfactory, have helo regain altitude if fuel state permits*
- *If all Attempts Fail, Initiate Mishap At Sea Procedures*

PRE-MISHAP PLAN

- *Initiate SAR*
- *OPREP Reporting*
- *Mishap Reporting*
- *Emergency Reclamation and Salvage*
- *Aircraft Mishap Board*
- *Investigation*

Note 1: No names (only ranks) on any voice or message report except to CO, HSL-48

Note 2: Pre-Mishap Binder kept in AIR Department Office and in CIC

ORDNANCE ISSUES

- *AGM-119B Penguin Missile*
- *AGM-114B/K Hellfire Missile*
- *ALE-39 Chaff/Flares*
- *General*
  - *Maintain same Launch/Recovery Profiles*
  - *Additional time required for load/unload of ordnance*
  - *HERO conditions as appropriate*

LASER SAFETY

- *Treat laser as a weapon*
- *Never look directly into an operating laser*
- *Use appropriate eye protection*
- *Do not operate lasers outside approved laser ranges unless specifically authorized*
- *Be aware of potential reflection hazards*
- *Nominal Ocular Hazard Distance (NOHD)*
  - *Rangefinder: 20 km*
  - *Designator: 23 km*
  - *Increased with any magnification (i.e. Binoculars)*

WOWU REQUIREMENTS

- *Aircrew/ASTAC Proficiency*
  - *D/N Landings (RAST)*
  - *LSO Qualifications*
  - *TACAN/ELVA Approaches*
  - *Lost Helo/Ditching*
  - *Smokelight Approach*
  - *HIFR and VERTREP*
  - *Simulated ASW and ASUW*
  - *Guard Check*
- *Briefs*
  - *LAMPS MK III*
  - *Safety*
  - *Flight Deck Walkthrough*
- *Flight Deck Team*
  - *Launch/Land/RAST*
  - *Emergency Flight Quarters/Crash and Smash*
  - *Hot Refuel*
  - *Traverse Quals*
  - *Ordnance load*
  - *Hangar Fire/Fuel Spill*